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14 MAY 1968

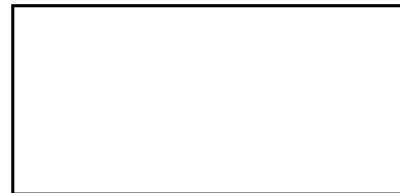
MEMORANDUM FOR THE RECORD

SUBJECT: Support Requirements Meeting ITEK Optical Bar
Camera (10 May 1968)

1. A meeting was convened at 0900 hours, Friday, 10 May 1968, in the OSA Comptroller's Room for discussions on ITEK Optical Bar Camera support requirements.

OSA

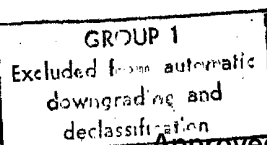
AFRDR-P



2. Previous discussions had brought up the possibility of (a) obtaining the loan of a [redacted] for the [redacted] Program and, by so doing; (b) authorizing ITEK to produce all the 13 Optical Bar Cameras to project specifications. This was a recommended alternative to earlier proposals whereby 1 or 3 "unmodified" versions would be procured and later modified to the Project's specifications.

3. [redacted] (AFRDR-P) had performed exploratory actions for the loan of the [redacted]. At this meeting, he requested specific details concerning its desired availability date, the required items of AGE and the contemplated period of the loan. These were established early in the meeting and [redacted] telephoned the information to the Pentagon.

(NOTE: The following developments occurred subsequent to the meeting.)



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a. [] was successful in obtaining loan of the []

b. It will be available for pickup by 1 July 1968 and its supporting AGE by mid-August 1968. Period of loan will be 4 - 5 months. OSA will assist, if required, on airlift of the items.

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c. Transactions will be coordinated with W/R Project Depot to insure accountability is against "Project []". The air movement will probably be direct from San Diego to North Base, Edwards AFB.

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d. USAF [] personnel are proceeding to the West Coast, week of 13 May 1968, to decide whether to release #3 or #4 [] to the Project and to firm up the AGE package and pick-up arrangements.

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e. USAF expressed desires the camera be returned in original "as is" condition. In this connection, it requested that the number of "Cycles" it would be run through be determined and that OSA obtain cost figures, in case it had to be placed in the ITEK Facility for re-work actions. [] advised this writer that not more than 15 flights are contemplated for this camera and that much of the period of the loan will consist of interfacing, installation and vehicle compatibility actions. In any event, the operational use that would be made of the [] is not expected to be of any great consequence. However, it still behooves OSA, as part of the loan agreement, to be prepared to defray such costs as may develop in restoring the camera to its original condition.

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f. AFRDR-P is also attempting to borrow an OOC Electronics Console for interim support of the test program.

4. Hatches:

a. Lockheed had not been requested to manufacture hatches for the Optical Bar Camera to fit the "R" vehicle, since approval for procurement of this camera was not

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received until recently. This meeting established the hatch requirement as a total of 11; i.e., 5 for SAC and 6 for Project. Lockheed will have to be advised of this requirement. (Action: D/M/OSA with staff coord).

b. Lockheed is currently producing 12 "B" hatches for the "R" vehicle. Question asked on whether or not it would be logical to request Lockheed to cease production of "B" hatches at a certain number and divert the balance to support of the Optical Bar Camera hatch requirements. Before this can be done, coordination with D/OPS/OSA must be effected on its short and long range operational plans as affect both the "R" and "C" Model vehicles and concepts regarding employment of optical sensors through these same periods. (Action: D/M/OSA, D/OPS/OSA & D/R&D/OSA)

c. Actions will have to be taken promptly, in either respect, on notifying the appropriate vendor regarding availability of "Glass" and delivery for installation in hatches. (Action: D/M/OSA, coord. D/R&D/OSA)

(NOTE: ITEK representative noted 8 weeks are required for glass delivery, however, it takes longer to fabricate the frames.)

5. Delivery Schedules and Concepts:

a. Dr. Flax memorandum states the distribution pattern of the Optical Bar Cameras will be 6 for Project, 6 for USAF and 1 in Project Depot storage. [redacted] will solicit an interpretation from Dr. Flax's office regarding "storage" of the 13th Optical Bar Camera. This group considered it more realistic to pre-position the camera at North Base under Project Depot administrative control, as opposed to storing it in a Depot warehouse. This would permit technicians to exercise the sensor and insure that adequate environmental controls are maintained. (Action: AFRDR-P)

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b. Delivery of cameras from factory to operating location should, preferably, be via air. P/Depot stated it can support this requirement, along with such augmentation as can be provided by Project aircraft.

25X1A c. [] recommended that "first batch" of cameras and AGE be delivered to Customer #1. The following sequence of camera deliveries was agreed to by conferees:

#1 thru #4	- North Base, Edwards AFB
#5 thru #8	- Davis-Monthan AFB
#9 and #11	- North Base, Edwards AFB
#10 and #12	- Davis-Monthan AFB
#13	- (to be determined)

d. ITEK representative stated his organization is shooting for delivery of #1 camera seven months from go-ahead. At the moment, this appears to be the end of November or the first of December 1968. Firmer details will be provided on this and other topics next week, (i.e., 15-16 May) when ITEK again meets with OSA personnel. If #1 is delivered in December, the remainder will be delivered at the rate of one-per-month. A speed-up in production to two-per-month could occur after #7 delivery, pending other developments in the [] Program.

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e. It was noted that an Optical Bar Camera could be flown in the "R" vehicle using an "H" hatch. It was reiterated at this meeting and is made a matter for record that this should not be tied to any operational employment thinking for the camera. This suggestion only applies to use of the [] Camera during test program actions at North Base. Use of an "H" Camera hatch with the Optical Bar Camera introduces degradations and other shortcomings.

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f. As an item of information, some of the functions to be tested with the [] include the hand controls, cockpit display, electrical interface and inter-connections, placement in the vehicle, etc. Since the Optical Bar Camera is comprised of much electrical circuitry, special safeguards against electrical interference from other systems must be applied.

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g. [] (D/R&D/OSA) stated planning is that the first 4 cameras delivered to North Base each be given 3 performance test flights and validations. If successful, the cameras will be accepted and certified. Subsequent acceptances of cameras will be upon completion of tests and certifications at the ITEK facility. SAC may elect to perform its own flight tests at later dates, however, it will accept its cameras once the Project has assured that a quality sensor is, in fact, available.

6. AGE (Aerospace Ground Equipment):

a. Approval for 7 sets of AGE to support the Optical Bar Camera operations had been received. Consensus at this meeting was that initial distribution of AGE be as follows:

Sets #1 and #2	- North Base, Edwards AFB
Sets #3 and #4	- Davis-Monthan AFB
Set #5	- North Base, Edwards AFB
Set #6	- Davis-Monthan AFB
Set #7	- (Pre-positioned at North Base, Edwards AFB)

(NOTE: As with the Camera deliveries, both Davis-Monthan and North Base are shown as initial recipients of these assets for planning purposes. Obviously, further distribution to SAC "OL's" and other Project activities will be made as dictated by operational requirements. ITEK stated delivery of AGE will be compatible with camera deliveries.)

b. At a previous meeting (29 April 1968) ITEK described the major line items of equipment that comprise a "set of AGE". Further discussions, this date, indicated further review should be made of these items as relate to the levels of Maintenance to be applied and the Detachment's location and operational role. For example, the initially proposed "set of AGE" includes a heavy check-out console that is well-fitted to home base utilization, but which could present weight and cube problems during a quick deployment. Rather than

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procure 7 sets of AGE (along with 7 of these consoles) it would appear more realistic that some "suit-case" (or mobile go-no-go) tester version be obtained and the number of heavy consoles reduced accordingly. In short, a home station would have a console to perform field maintenance functions, as well as the capability to deploy rapidly with the less cumbersome suitcase version. ITEK is re-studying the entire AGE composition per the above concepts and provide its recommendations. Under this thinking, the following distribution of check-out consoles and the suitcase testers was considered appropriate:

Project: Det. G - 1 console & 2 suitcase testers
Det. H 1 console & 1 suitcase tester

SAC: (OL's & D/M)- 3 consoles & 1 suitcase tester

c. ITEK will also give this Headquarters its recommendations regarding the type of shipping container appropriate for this camera; i.e., (1) a box-like, heavily-reinforced container, (2) a shipping dolly and housing combination, or (3) a "mix" of these two types of AGE. (The initially-recommended shipping container plus camera totals about 900 lbs.)

7. Spares and FAK's

ITEK has an initial proposed listing of spares. However, at the request of Project Depot and ITEK representatives, this subject will be gone into further detail in the near future. Spares support of the Optical Bar Camera is not expected to be a critical problem area. The pre-dominance of electrical circuitry in this sensor will permit field maintenance through replacement and insertion of modules or cards.

8. Tech Data

ITEK is in the preliminary phases of developing tech data for this sensor. Among the manuals to be published are a flight handbook (classified), and the appropriate field maintenance, factory maintenance and parts break-down manuals.

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Further discussions need to be held with ITEK by USAF and Project personnel on this subject. Participants agreed to hold this at a later date.

9. General Topics:

a. The "R" vehicle will have the Mark IV hand control. No problems are foreseen on Optical Bar Camera interface with the time code generator (TCG)

b. The type of film used on the Optical Bar Camera is 5", type 3404. Project Depot representative stated he will be conferring with ITEK on establishing levels of spools, as can be best estimated by anticipated consumption and pipeline factors.

c. At such time in the future that the Optical Bar Camera requires factory maintenance actions, these will be performed at the Palo Alto facility. Participants at this meeting were advised not to get too concerned at this time about the equipment, etc. that will be required at that facility.

d. A subsequent telephone call from AFRDR-P on 13 May 1968 advised this writer that Dr. Flax's office has agreed to pre-positioning #13 camera at North Base, as recommended in paragraph 5a.

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Lt. Col. USAF
C/P&R Div/M/OSA

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PRD/M/OSA: [] : cm

Distribution:

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#1 - WPAFB []

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#2 - W/R Depot []

#3 - D/M/OSA (Chrono)

#4 - RB/OSA

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